

7.1.1 Writing Green Specifications

A key component to greening Federal facilities is writing green specifications for projects. Green specifications are integrated throughout construction documents in order to implement environmentally sound construction processes, design intent, and material selection.

Opportunities

Even though specifications are part of the construction documents for projects, opportunities to influence the content start at project conception. When the project is first defined—before beginning the design and selecting architectural/engineering (A&E) firms—many specific targets, procedures, and design intents can be identified. These include building performance targets, construction management procedures, recycled content goals, and site-impact limits.

It is all about communication. Federal facility managers, designers, and representatives need to clearly articulate green goals and any predetermined green attributes to the design professionals. The design professionals need to describe the green specs effectively for the building contractors, subcontractors, and materials suppliers. The specifications accompanying the drawings need to fully describe the project, materials, and construction details.

During the early design phases, design professionals should be creating outline specifications that will reinforce the project goals. Then, at the construction documents phase, explicit green specifications with lists of products and execution techniques must be described—even more carefully than with standard practice because green building is different.

Since the actual writing of green specifications for construction is normally in the hands of design professionals serving as consultants to the government—rather than in the hands of the Federal facility managers and representatives—clear guidance about project goals must be conveyed from the Federal agency to the consulting architects and engineers.

Technical Information

Following World War II, Federal government architects wanted a standard format for construction specifications; this led to the creation of the Construction Specifications Institute in 1948. The CSI MasterFormat™ is a common organization of construction specifications for both public and private facilities. The format is organized into 16 divisions, with 1 covering General Administration, and 2 through 16 covering specific building systems and/or components. Within each of the divisions, specifications information is organized into three topics: General, Products, and Execution. Green

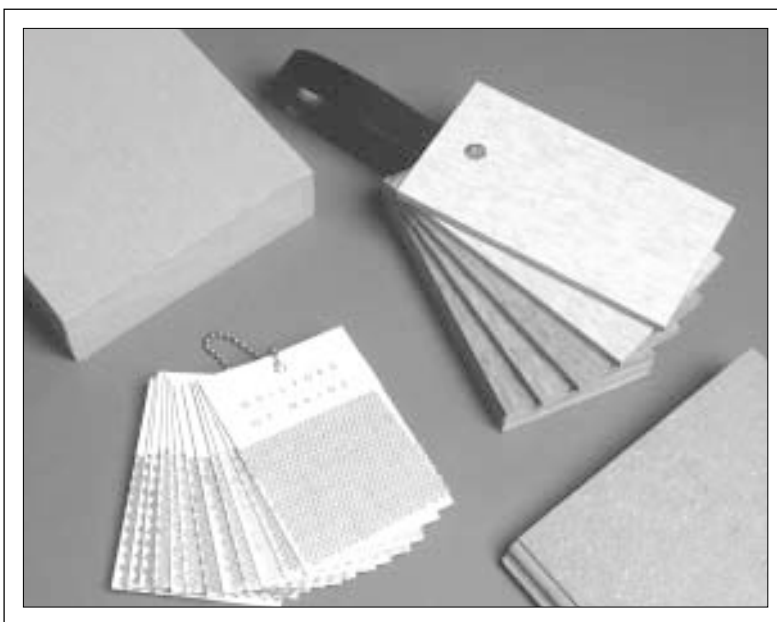


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Be sure to link the general material descriptions with the Products and Execution components of the specifications.



With most Federal government projects, it is necessary to specify products that can be supplied by at least 3 manufacturers.

References

Spiegel, Ross, and Dru Meadows, *Green Building Materials: A Guide to Product Selection and Specification*, John Wiley & Sons, New York, NY, 1999.

Mendler, Sandra F., AIA, and William Odell, AIA, *The HOK Guidebook to Sustainable Design*, John Wiley & Sons, New York, NY, 2000.

MasterFormat™, The Construction Specifications Institute, Alexandria, VA, 1999.

GreenSpec: The Environmental Building News Product Directory and Guideline Specifications, BuildingGreen, Inc., Brattleboro, VT, 1999; (800) 861-0954; www.greenspec.com.

specifications can and should be integrated throughout these three topics for each of the 16 divisions.

Division 1, General Requirements, encompasses the overall intent relating to green technologies. This is the place to describe the construction waste management plan and the general procedure for accepting “alternates” that may have similar or better green performance than products specified later on.

Divisions 2 through 16 describe each building component in general, products, and execution. For example, in Division 8, windows are described in terms of thermal performance—use this section to set the performance requirements for the glazing and window units. Finishes are described in Division 9—use this section to establish recycled content, maximum levels of volatile organic compounds (VOCs), and other green attributes.